

AMENDMENTS TO THE SPECIFICATION

On page 85, please replace the paragraph beginning on line 22 and ending on page 86, line 26 with the following amended paragraph:

The 5' primer used to amplify TCR sequences contains the following restriction sites at the 5' end of the primer: *Xba*I, *Eco*RI and *Mlu*I followed 18-21 nucleotides comprising a consensus sequence derived from the V regions of human TCRs. Therefore the 5' primer will comprise sets of degenerate primers having the following sequence:

5'-TCTAGAATTCACGCGT(N)₁₈₋₂₁-3' (SEQ ID NO:78), where N is any nucleotide and the 18-21 nucleotide stretch represents a consensus V region sequence. The following 3' primer is used in conjunction with the above-described consensus 5' primer to amplify the extracellular domains of human TCR α chains:

5'-CGATCGTGGATCCAAGTTTAGGTTTCGTATCTGTTTCAAA-3' (SEQ ID NO:35). The 3' connection for the TCR α chain is made after the asparagine which appears at position 110 of the constant (C) region of the α chain. The following 3' primer is used in conjunction with the above-described consensus 5' primer to amplify the extracellular domains of human TCR β chains: 5'-CGATCGAGGATCC AAGATGGTGGCAGACAGGACC-3' (SEQ ID NO:36). The 3' connection for the TCR α chain is made after the isoleucine which appears at position 147 of the C region of the β chain. These 3' primers are designed such that in both cases (*i.e.*, for both the α and the β chain of the TCR) the connection between the extracellular domains of the TCR with the thrombin site is made at the fourth amino acid residue from the apparent beginning of the respective transmembrane regions of the TCR chains. Both 3' primers contain recognition sites for *Pvu*I and *Bam*HI at their 5' ends. The restriction sites located at the 5' ends of the primers allows the resulting PCR products comprising a TCR chain to be removed as a *Xba*I or *Eco*RI or *Mlu*I (5' end)-*Bam*HI or *Pvu*I (3' end) fragment and joined with the appropriate thrombin-transmembrane DNA sequence [as a *Bam*HI or *Pvu*I (5' end)-*Not*I (3' end) fragment] and inserted into any of the SD7 vectors (*e.g.*, pSR α SD7). The resulting expression vectors (one for each of the α chains and the β chains of the chimeric TCR) are co-transfected using electroporation into BW5147.G.1.4 cells along with the amplification vector pSSD7-DHFR (Ex. 3) and the selection vector pMSD5-HPRT (Ex. 2). The amount of each plasmid DNA to be used (the plasmids are linearized

before electroporation), the conditions for electroporation, selection and amplification are described above. The resulting amplified cell lines will express the chimeric TCR heterodimer on the surface of the cell. The TCR is solubilized by digestion of the cells with thrombin. The thrombin solubilized extracellular domains will have 3 (TCR β) or 4 (TCR α) novel amino acids at the C-termini.

On page 92, please replace the paragraph beginning on line 9 and ending on line 24 with the following amended paragraph:

pMSD8 is similar to pMSD5 but contains the poly A site from the human elongation factor 1 α gene. pMSD8 was constructed as follows: A 292 bp fragment containing the poly A site from the human elongation factor 1 α gene (~~SEQ ID NO:78~~) was isolated from MOU cell (GM 08605, NIGMS Human Genetic Mutant Cell Repository, Camden, NJ) genomic DNA using PCR. MOU genomic DNA was isolated using conventional techniques. The PCR was conducted using 10 μ g MOU genomic DNA and 1 μ M final concentration of each primer in a 400 μ l reaction. Reaction conditions were 94°C for 1 minute, 60°C for 1 minute, 72°C for 1.5 minutes, 30 cycles. *Taq* DNA polymerase was obtained from Perkin-Elmer. The following oligonucleotides were used to prime the PCR: 5EF1 α PolyA: 5' GAATTCTTTTTTGGTGTGGCAG 3' (SEQ ID NO:79) and 3EF1 α PolyA: 5' ATCGATATTCCTTCCCCTTCC 3' (SEQ ID NO:80). The 3EF1 α PolyA oligonucleotide generates a *Cla*I site at the 3' end of the poly A site and the 5EF1 α PolyA oligonucleotide generates an *Eco*RI site at the 5' end of the poly A site. Digestion of the PCR product with *Eco*RI and *Cla*I yields a 292 bp *Eco*RI/*Cla*I fragment.

Please replace the Sequence Listing filed August 9, 2001 as pages 106-142 with the attached Sequence Listing numbered pages 1-33.